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our minds that the nebulous haze is probably connected with the details which it surrounds.

It is, again, the inference of the mind which, upon looking into the stereoscope, associates those details of the corona which are not covered and uncovered by the Moon with those details which are so covered up and uncovered, or rather with the solar prominences, for there is very little detail of the corona proper to be seen at points so near to the Moon's limb.

If two similar photographs of the corona, copied from the same negative, be placed side by side in the stereoscope, the same effect of the Moon standing out in front of the corona is not produced.

We may therefore regard the stereoscope as a rough and ready means of detecting horizontal parallax between two photographs, though a much more satisfactory determination of the existence and amount of such parallax may be arrived at by a careful measurement of the photographs themselves.

Secondly, as to what may be learnt with regard to the disposition of the rays of the corona from any appearances of relief that may be detected with the stereoscope.

During four minutes of totality, our Earth would move through an angle, with respect to the Sun, of somewhat less than ten seconds of arc; while the Sun would turn upon his axis (carrying, we may conclude, all the detail of his coronal rays with him) through an angle of about two minutes of arc. This would leave a total alteration in the position that the arrangement of coronal rays would present to us of about one minute fifty seconds of arc, an angle too small to give appreciable relief in the stereoscope. That such an angle is far too small may be seen from the consideration that the maximum possible shift given by such a revolution to the end of a ray extending to the distance of the Sun's radius from the photosphere would not subtend an angle of one second, as viewed from the Earth, and the shift of such rays as are visible to us would be much less.

We must therefore reject all such appearances of solidity and relief amongst the rays of the corona as spurious effects produced by shading or some of the other unknown causes which are apt to deceive the mind.

On the other hand, the stereoscope is undoubtedly useful as affording a ready means of superposing, and thus showing the absolute identity as to form of the details of the corona at the beginning and end of totality.

The Tables of Jupiter's Satellites. By J. Maguire, Esq.

The proposal of the Astronomer Royal, published in the January Number of the *Monthly Notices*, viz., that one observatory should be permanently devoted to the observation of the phenomena of *Jupiter's* satellites, has undoubtedly a pre-

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ferential claim to the consideration of the Royal Astronomical Society, and I think I may safely add that it has an interest for many outside the Society, who are in the habit of using a telescope. As one standing near the threshold of the Temple of Science, but not, he fears, having in his possession the password which confers the privilege of entering and mingling with the votaries within, I am glad to find that the time has at last come when the judgment and influence of the Society are likely to be successfully employed in establishing such an observatory.

Of the want of a public observatory other than meridional, there cannot I think be a question. Col. Strange proclaims the want and points to the quarter from which support should come. It may be observed that whenever a new Ordnance map of these islands is declared upon authority to be wanted, theodolites and other instruments are very soon forthcoming for the work. And who will venture to say that England has spent so much money on theodolites and Armstrong guns that she cannot afford to set up a few equatoreals for the purpose of observing the satellites of *Jupiter* in order to construct new tables which would give to several pages of the *Nautical Almanac* a value which they do not now possess? Any idea of this kind is instantly put to flight by remembering the various liberal grants recently made by her Majesty's Treasury for the observation of the phenomena of solar eclipses, and the satisfactory provision made for the observation of the transit of *Venus* in 1874.

It is not pleasant then, to observe the rather desponding tone of this passage which I quote from the paper of the Astronomer Royal: "I see no prospect of obtaining a sufficient number of observations unless some observer would consent to give his entire observing energies to these observations."

Upon whom may I ask has fallen the mantle of the observer of *Gamma Virginis*?

Norwich, May, 1872.

On Astronomical Units. By C. C. De Crespigny.

In treatises on astronomical subjects I have observed that in English works, diameters and distances are expressed in British statute miles of 1760 yards each, in French works in kilometers, and I presume that in German and other works they are expressed in terms of the standard measure of length of the country in whose language the treatise may be written: also that in England we acknowledge another mile of 2026 yards, the sixtieth part of a degree of the equator, which, as it is also acknowledged in other countries, may be considered to have a greater right to be accounted a mile than the statute mile; at least when speaking on astronomical subjects. I have also read the remark in treatises above alluded to sometimes appended to a statement of the distance of a star

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